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# CORPORATE GOVERNANCE, PROFESSIONAL REGULATION AND AUDIT QUALITY

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*The recent spate of corporate failures around the world has attracted considerable attention from corporate regulators and professional bodies. Although corporate failures are not new, what is of increasing concern to stakeholders is the unexpected collapse of many apparently financially robust companies. One of the many victims of these collapses has been the reputation of audit firms, the audit process, and the accounting profession generally. The purpose of this paper is to first, outline the importance of audit quality in the operation of capital markets. Second, to place the issue of audit quality in context. Third, outline and synthesize prior research on audit quality and finally, to consider the responses that regulators and the profession can and should consider based on the available empirical evidence.*

## Introduction

Recent corporate collapses have led to a number of investigations into the effectiveness of corporate governance practices and the quality of the audit process worldwide. In particular, concerns were universally expressed regarding the reliability of financial reports and the effectiveness of audits. These events have again focused attention on the reliability of financial reports and the effectiveness of auditors to warn investors of impending corporate collapse. In particular, the auditing profession has continued to receive increased attention from a number of sources around the world.

In Australia, the collapse of HIH Insurance in 2001 led the Federal Government to establish an inquiry chaired by Professor Ian Ramsay into auditor independence. Additionally, the draft Bill for the ninth stage of the Corporate Law Economic Reform Program (CLERP 9) proposed a range of measures designed to enhance the general corporate disclosure framework including relevant recommendations of the HIH Royal Commission. The Australian Stock Exchange's Corporate Governance Council has also issued a report, titled "Principles of Good Corporate Governance and Best Practice Recommendations".

Similarly in the US, in response to the Enron collapse, new regulations have been issued. On July 30, 2002, the Sarbanes-Oxley Act of 2002 was enacted in response to issues uncovered at Enron, Global Crossing, and other corporations (McGowan and Brisendine 2003). Among other things, the Act (and related SEC proposed regulations) mandates new limits on accountants who provide opinions on public company financial statements and adds new corporate governance requirements (McGowan and Brisendine 2003). The Sarbanes-Oxley Act established an independent review by federal accountants of accounting firms with more than 100 audit clients (replacing the peer review process), established an accounting oversight body with the authority to investigate and punish accounting firms (funded by public corporations and overseen by the SEC), and restricted the consulting services an audit firm can provide to clients. In the UK, various governance initiatives have also been undertaken including the issuance of the Combined Code in 2003.

Ramsay (2001) noted that two motivating factors for the review of Australia's regulations governing auditor independence are regulatory developments overseas and publicity surrounding the role of auditors in recent Australian corporate collapses. Similarly, the US government has indicated dissatisfaction with the profession's self-regulation as practiced in the years leading up to the Enron collapse. It is clear from such moves that there has been considerable dissatisfaction at a number of levels with contemporary corporate governance practices and the roles of auditors and auditing.

Auditing is considered to be one of a number of institutional and market-induced arrangements relating to shareholder/manager conflicts. Jensen and Meckling (1976) indicate that auditing derives value from its role in reducing information asymmetries by providing external verification of the reliability of a firm's financial statements. The effectiveness of this external monitoring is dependent on audit quality. It is, therefore, the nature of a high quality audit which makes audit services valuable. High quality audits result in reliable financial information for capital markets, which is essential if capital markets are to function efficiently. Without high quality audits, the quality of financial information available to external financial report users is likely to deteriorate. Audit quality can therefore play an important role in the effective allocation of scarce economic resources through its role in capital markets.

In considering the importance of audit quality in producing reliable financial information, Monroe and Tan (1997, p. 37) point out that according to Ettredge, Shane and Smith (1988), accounting information that is produced in conjunction with a high quality audit is better able to reflect a company's specific economic circumstances, and that this may affect future cash flows. Further, they note that Dopuch and Simunic (1980) have indicated that "a costly audit by a credible auditor can either signal management's honesty to investors or reduce agency costs by restricting top management's ability to conceal, through misrepresentation in the financial statements, the consequence of actions taken in the best interests of top management (self-serving behaviour) but not shareholders". Monroe and Tan (1997, p. 38) therefore, conclude that "the quality of an audit can affect

the reliability of audited financial information, which in turn plays an important role in capital markets”.

Ramsay (2001, p. 103) reports that any lack of confidence by the financial markets in the integrity of financial statements “can engender fear and a reluctance to invest, to the detriment of the economy”. As indicated by Coffee (2001, p. 2), without high quality audits “it is reasonable to believe that market efficiency would be lower and the cost of capital higher”. In a similar vein, Wallman (1995, p. 81) has commented that “without accountants to ensure the quality and integrity of financial information, the markets for capital would be far less efficient, the cost of capital would be higher and our standard of living would be lower”. Clearly then, the quality of the audit process is one of a number of matters that are fundamental in providing the required confidence participants in financial markets require.

## **Audit Quality in Context**

DeAngelo (1981a) has developed a demand and supply rationale for audit quality and provides a frequently cited definition of audit quality. Audit quality in this context is defined as the probability that an auditor will both discover a breach in the accounting system and further report the breach. The discovery of a misstatement measures quality in terms of the auditor’s knowledge and ability, whilst the reporting of a misstatement is dependent upon the auditor’s incentives to disclose.

The probability that an auditor will detect a breach depends largely on the probability of discovery, which is related to the auditors’ competence. Similarly, the probability that an auditor will report the detected breach is related to the auditors’ independence. In essence, in order to create a demand, or increase the demand for auditing, auditors have to convince the market that they can detect breaches and are in a position to report them. Viewed from this perspective, audit quality has two components, namely, detection of contract breaches and disclosure of contract breaches. Audit quality is, therefore, dependent upon the auditors’ ability to avoid both detection error and disclosure error.

In a similar vein, Herrbach (2001) indicates that the existence and justification of auditing is largely dependent on two sets of factors exhibited by auditors, namely, technical quality and professional behaviour. Herrbach (2001) points out that any reduction in the care and scepticism involved in auditing (technical quality) can directly threaten the outcome of the audit engagement and therefore the validity of the audit opinion. Similarly the preservation of a high level of apparent “professionalism” (professional behaviour) is also an important aspect in the social image of auditing. Herrbach (2001) concludes, therefore, that apparent auditor behaviour is as important as technical competence with regard to audit quality, particularly since auditor behaviour is more visible. Figure 1 below from Herrbach (2001) outlines these relationships.

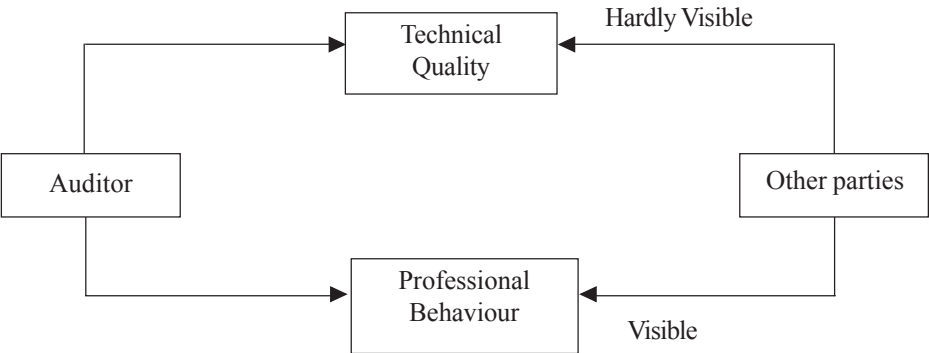


Figure 1: The Duality of Audit Quality

Herrbach (2001) indicates that at the macro level, the recognition of audit quality by the economic environment is particularly important to the long-term survival of audit firms. Significantly, the future of the profession now more than ever, given recent corporate debacles, depends on its ability to assert and legitimize the value of audit methodologies and outcomes. At the micro level, audit quality is a fundamental element in the competitive market for audit services. Moizer (1997), for example, points out the reputational impact of audit quality perceptions on the structure of the market for audit services.

Whilst the DeAngelo definition of audit quality has been widely quoted, it has also been criticized as not being broad enough and as a consequence, does not therefore, provide a full definition for audit quality. Sutton (1993) has observed that whilst a considerable number of studies have examined issues concerned with audit quality, no single generally accepted definition of audit quality has yet emerged. Sutton (1993) concludes that the reason for the absence of a single definition of audit quality is due to the apparent conflicting roles of participants in the audit market. Moizer (1986) notes that diversity in the measurement of audit quality necessarily requires any definition of audit quality to utilize a combination of both outcome and process measures. Reisch (2000) attributes the absence of a single measure of audit quality to the fact that it is a “multidimensional latent construct” and is, therefore, somewhat difficult to measure.

Audit quality, however, is characterised by strong ambiguity that makes it hard to demonstrate. Warming-Rasmussen and Jensen (1998), for example, indicate that the measurement of audit quality is problematic, both intrinsically and for financial statement users. In other areas of economic activity, it is possible to develop objective and precise criteria to measure quality, however, this is not the case for audit quality. As a result, the extant literature relating to audit quality reflects this situation and includes multiple measures of audit quality.

## Prior Research into Audit Quality

There is a vast literature relating to audit quality and to the measurement of audit quality. Audit quality has been examined from a differential pricing viewpoint, for example Simunic (1980); Francis (1984); Palmrose (1986); Francis and Simon (1987); Simon and Francis (1988); Craswell, Francis and Taylor (1995) and Colbert and Murray (1998).

Audit quality has also been studied by using surrogates for audit quality in order to consider audit quality differences between accounting firms for example (Dopuch and Simunic (1980); Nichols and Smith (1983); Simunic and Stein (1987); Palmrose (1988); Ettredge, Shane and Smith (1988); Wyer, White and Janson (1988); Eichenseher et al. (1989); Monroe and Tan (1997) and Krishnan and Schauer (2000).

As previously indicated, despite the extent of that literature, no single generally accepted definition of audit quality has emerged, nor any single generally accepted measure. Much of the audit quality literature derives from DeAngelo's (1981a) frequently cited definition of audit quality.

Whilst the DeAngelo (1981a) definition of audit quality is probably the most widely quoted in the literature, Krishnan and Schauer (2000) have indicated that, as they believe that both aspects of the DeAngelo (1981a) definition are unobservable, researchers have taken one of two approaches to measuring audit quality in empirical work: a direct and an indirect approach.

Firstly, audit quality has been measured utilising a more direct approach and is based on the assumption that the probability of discovery and reporting of contract breaches will be reflected in features of the audit such as errors made by auditors. Examples of studies using the direct approach in relation to auditor errors are Brown and Raghunandan (1995) and Colbert and Murray (1998), both of which used the outcomes of peer review programs to investigate audit quality. Examples of studies using a direct approach in relation to financial statement outcomes include Balsam et al. (2003) (abnormal accruals) and Krishnan (2003) (valuation of earnings surprises). Because of their focus on outcomes of the audit process, these studies view audit quality from an ex-post perspective.

Secondly, audit quality has been measured in an indirect way by looking at correlates of audit quality. Research using the indirect approach is of two types, both of which consider assessment of audit quality from an ex-ante perspective. The first type measures audit quality using surrogates of, or proxies for, quality. The second indirect approach assesses audit quality by examining the attributes or factors perceived to be associated with audit quality by parties involved in, or affected by, the audit process and audit reports. Studies of this type are also referred to as adopting a behavioural perspective on audit quality. The next section will review both types of studies that measure audit quality in an indirect way.

## **Surrogate studies of audit quality**

Sutton (1993) observes that studies that have attempted to measure audit quality using surrogates have focussed on external measures of audit quality since audit market participants are generally unable to observe audit quality directly. Consequently, results of these studies have identified a number of audit firm quality factors important in assessments of audit quality. The principal factors investigated in surrogate studies of audit quality include audit firm size, litigation experience, auditor reputation, auditor tenure, the provision of non-audit services, audit structure and industry experience. Each of these factors is discussed in the order below.

### **Audit Firm Size**

The most commonly used surrogate for audit quality is audit firm size (e.g., Dopuch and Simunic, 1980; DeAngelo, 1981a; Francis, 1984; Palmrose, 1986; Francis and Simon, 1987; Menon and Williams, 1991; Simunic and Stein, 1987; Deis and Giroux, 1992; Craswell et al., 1995; Colbert and Murray, 1997; Morris and Strawser, 1999; Krishnan and Schauer, 2000).

It has been argued that firm size is an effective surrogate for audit quality because it “proxies for the magnitude of the firms’ client-specific quasi-rents” (DeAngelo, 1981a). DeAngelo (1981a) proposed that larger audit firms receive fee premiums because they have a greater reputation at stake and that reputation, together with their more substantial client base, provides them with the incentive to be more independent, leading to higher audit quality. Simunic and Stein (1987), on the other hand, assert that larger audit firms are better than smaller audit firms at detecting errors because they have greater resources at their disposal and can attract employees with superior skills and experience. Consequently, larger firms are able to conduct their audits to a higher standard than smaller firms.

Although the findings of some studies have not supported the audit firm size/audit quality association (e.g., Simunic, 1980; Nichols and Smith, 1983; Wyer, Whyte and Janson, 1988), generally speaking, most studies have shown that larger audit firms receive higher audit fees than smaller audit firms, although whether the fee premium is attributable to higher audit quality is not resolved empirically. The weight of evidence therefore, both theoretical and empirical, supports the association such that audit firm size is now generally accepted as being closely associated with, and representative of, audit quality.

### **Litigation experience**

A number of researchers have investigated audit firm litigation experience as a surrogate for audit quality. Latham and Linville (1998) indicate that such studies have examined either client and auditor characteristics involved in auditor litigation or auditor behaviour such as client screening and audit portfolio decisions, and changes in audit quality motivated by changes in the civil liability environment. The results of these studies demonstrate product differentiation by Big N audit firms<sup>1</sup> and that they are suppliers of high quality audit services.

Palmrose (1988), for example, used auditor litigation as a surrogate for audit quality, arguing that litigation reflects audit failure and, hence, reflects audit quality. Palmrose (1988) found evidence of quality differences between Big N and non-Big N firms, specifically that Big N auditors were less likely to be involved as defendants in audit litigation. Based on the assumption that a higher (lower) quality auditor is involved in less (more) audit litigation, the results of Palmrose (1988) are consistent with the contention that “Big” audit firms are higher quality suppliers of audit services than smaller firms.

### **Auditor Reputation**

Auditor reputation has been used as a surrogate for audit quality in a variety of studies, including fee studies, studies of Initial Public Offerings (IPOs) of shares, and studies of the stock market effects associated with auditor change (Moizer, 1997). Each type of study assumes that there is an observable economic result from the employment of an audit firm with a high reputation. This assumption is based on economic theory that firms have an incentive to incur higher costs in order to produce a higher quality service (Klein and Leffler, 1981; Shapiro, 1983) and that consumers will recognise this and be prepared to pay higher fees, or accord other economic benefits, in order to receive a higher quality service. In other words, audit firm fees or other economic benefits, are determined by audit firm reputation.

The empirical evidence from the three types of studies reviewed by Moizer (1997) generally supports the association between auditor reputation and audit quality. The results of audit fee studies have generally found that an audit fee premium exists for the Big N audit firms (Moizer, 1997). The IPO studies generally conclude that Big N firms have a reputational effect manifested in IPOs associated with those firms gaining a higher level of initial returns. Finally, auditor change studies have generally found that shares in companies that changed from non-Big N firms to Big N ones tended to have better stock market performance (e.g., Johnson and Lys, 1990; Eichenseher, Hagigi and Shields, 1989).

### **Auditor Tenure**

Auditor tenure has been regarded as a surrogate for audit quality with the association between the two being explained by either a regulatory or economic argument (Geiger and Raghunandan, 2002). The regulatory argument, going back to Mautz and Sharaf (1961) is that the longer the tenure of an audit firm with a particular client, the closer the identification of the firm with the client management’s interests and the greater the impairment of auditor independence and audit quality.

The economic argument (DeAngelo, 1981b) is that audit independence is likely to be impaired in the early years of tenure because of the practice of “low-balling” (pricing the initial audit fee below cost) in order to obtain a client. That the practice of “low-balling” exists has been well demonstrated both empirically (e.g., Simon and Francis, 1988) and experimentally (e.g., Schatzberg et al, 1987). Given that auditors will seek to maintain newly acquired clients long enough to recoup initial losses, audit independence and, therefore, audit quality may be impaired in the early years of audit tenure.



A number of studies have also considered the issue of auditor tenure and audit quality in the context of calls for mandatory auditor rotation. Although there are theoretical arguments to associate tenure with beneficial and adverse effects, the empirical evidence from studies such as Myers, Myers and Thomas (2003) suggests that the longer the tenure the more beneficial this will be in relation to auditor independence and audit quality.

### **Provision of Non-Audit Services**

The provision of non-audit services (NAS) has also been associated with audit quality. The provision of NAS has long been regarded by corporate regulators in Australia and elsewhere as a threat to audit independence and, hence, audit quality.

Empirical evidence on the effect of NAS on auditor independence and audit quality is mixed. For example, in Australia, Wines (1994) found a negative association between NAS and qualified audit opinions, indicating the potential for an independence problem in the presence of NAS. By contrast, Barkess and Simnett (1994) and Craswell (1999) found no evidence that NAS poses a threat to auditor independence.

In the US, Elstein (2001) found that large fees generated from NAS negatively affect auditor independence and audit quality. Similarly Frankel, Johnson and Nelson (2002) obtained a compelling set of results against NAS indicating that firms with higher NAS are associated with more earnings management, i.e. larger abnormal accruals. By contrast, Ashbaugh, LaFond and Mayhew (2003), Chung and Kallapur (2003) and Reynolds, Deis and Francis (2004) found no evidence to suggest that NAS impair audit quality.

While the empirical evidence is unclear, what is clear is that corporate regulators worldwide, and many other stakeholders, consider NAS a threat to independence. This view has been reinforced recently by spectacular corporate collapses and apparent audit failures associated with them.

### **Audit Structure**

Audit structure has also been examined as a surrogate for audit quality. Cushing and Loebbecke (1986, p. 32) classified audit approaches as highly structured, semi-structured, partially structured and unstructured, and defined a structured audit approach as “characterised by a prescribed, logical sequence of procedures, decisions and documentation steps, and by a comprehensive and integrated set of audit policies and tools designed to assist the auditor in conducting the audit”. Structured audit approaches have been seen as a response to the increasing complexity of the business environment, increasing regulation, threats to the legitimacy of the auditing profession, the threat of litigation, and the apparent shortcomings of unaided auditor judgments (Bowrin, 1998).

With respect to audit quality, Carcello, Hermanson and Huss (1996) argue that a structured audit methodology promotes greater efficiency and effectiveness when used for structured and semi-structured audit tasks. There is also evidence that the structured audit approach enables audit firms to exercise greater control over audit task performance, and may

provide human resource benefits by reducing job stress and staff turnover (e.g., Ashton and Willingham, 1989; Dirsmith and McAllister, 1982). By contrast, Francis (1984) argues that imposing structure is reductionist and that firms adopting such an approach assume audit tasks can be simplified and standardised, whereas evidence suggests that many audit tasks are non-routine and demand less standardisation rather than more. Similarly, Dirsmith and Haskins (1991) found that auditors in firms with an unstructured audit approach used more factors in assessing risk relative to auditors in firms with structured approaches. The implication is that structured audit approaches may have a negative impact on audit quality.

### **Industry Experience**

Industry experience is a further factor that has been suggested as implicated in assessments of audit quality. Firms with multiple clients in the same industry may be argued to have a greater appreciation of the audit risks unique to that industry. Conversely, firms with few clients in an industry may not have the incentive or ability to keep up-to-date with changes and new developments in the industry. Solomon et al. (1999) indicate that industry experts have more experience and make better audit judgements. Hogan and Jeter (1995) also support this link between industry experience and audit quality arguing that firms with industry specialisation have financial savings and gains in audit quality. So too do Dies and Giroux (1992) who argued that firms with a higher concentration of clients in a particular industry will provide greater audit quality because they have the opportunity to earn a reputation for servicing that industry. Because that reputation is of value to audit firms in the form of higher audit fees, there is an economic incentive to protect their reputation by providing higher quality audits.

### **Behavioural Studies of Audit Quality**

Unlike studies that have utilized surrogate measures for audit quality, which represent outcome measures, Sutton (1993, p. 90) indicates that the behavioural studies are based on process measures of audit quality and that “the ultimate measure of quality is made by the consumer of the product” i.e., based on historical performance. Process measures enable the producer to rectify weaknesses in the process so that outcome quality can be improved. Consequently, results of the behavioural studies have revealed that, in addition to audit firm attributes, a number of audit team attributes are also important in assessments of audit quality.

The surrogate studies of audit quality discussed in the previous section typically examine only one surrogate in each study. By contrast, the behavioural studies, which examine perceptions of attributes or factors associated with audit quality, typically examine combinations of factors considered important in perceptions of audit quality.

Given that the behavioural studies examine a combination factors, it is not possible to review these studies in the same way as the surrogate studies, i.e. on an attribute-by-attribute basis. The review of the literature in this area will be limited to the more significant behavioural studies, although other behavioural studies are also referred to as appropriate.

Shockley (1981) investigated the perceived effects of competition, the provision of management accounting services, audit firm size and tenure on audit independence. Perceptions of independence were obtained from financial analysts, commercial loan officers and auditors through an experimental task. The judgments were analyzed using factorial analysis of variance techniques. The judgments of the three groups were found to be similar with competition, provision of management accounting services and audit firm size being significant in judgments of perceptions of audit independence. Audit firm tenure with a particular client was found not to be significant.

Mock and Samet (1982) identified potential attributes from the literature that are perceived by financial statement preparers, auditors and users as being related to audit quality. The study relied upon input from practising auditors and utilized a hierarchical multi-attribute evaluation model in order to develop a list of attributes that could be used to evaluate audit quality. The results of the study identified five key audit quality characteristics, namely, planning, administration, procedures, evaluation and conduct.

Knapp (1985) examined how contextual factors in auditor-client conflicts affect the perceived ability of auditors to resist management pressure. Four factors, namely, nature of the conflict issue, client's financial position, provision of management accounting services and the degree of competition in the audit market, were identified as hypothesized to affect users' perceptions of audit conflict outcomes. The results revealed that commercial loan officers' perceptions of the ability of the client to influence the outcome of an auditor-client conflict increased as the subjectivity in technical standards increased and the clients' financial position improved. Additionally, the likelihood of conflict being resolved in the clients' favour was only found to be weakly increased through the provision of management advisory services and competition.

McKinley, Pany and Reckers (1985) undertook a study to investigate whether the provision of management advisory services by CPA firms, and firm type and size, affect perceptions of independence. Utilising an experimental task involving the review of a loan application, 261 bank loan officers participated in the study. The results of the study suggest that bank loan officers believed that financial statements audited by Big N audit firms were more reliable than those audited by non-Big N firms. Additionally, the loan officers' confidence that the financial statements were free from fraud increased if the audit firm also provided management advisory services.

Schroeder, Solomon and Vickery (1986) investigated the perceptions of audit committee chairpersons and audit partners on factors that are perceived to affect audit quality. They undertook a survey of audit committee chairpersons of the *Fortune 500* and Big N audit firm partners to determine how they defined audit quality. The participants were asked to rank 15 factors (six audit team factors and nine firm wide factors) in terms of their importance to audit quality. The authors concluded that audit team factors (e.g., partner/manager involvement) were considered as more important in determining audit quality than were firm wide factors (e.g., quality control factors). Audit partners' perceptions were generally consistent with those of the audit committee chairpersons.

Sutton and Lampe (1990) focused on the development of a more comprehensive measure of audit quality based on the evaluation of the actual audit process. The study utilized structured group processes in order to develop an audit quality evaluation model. Practising auditors were asked to perform a group exercise in order to develop the evaluation model. The model developed incorporated 19 audit quality attributes classified into the categories of planning, fieldwork and administration. The evaluation model that was developed included one measure for each quality attribute.

Knapp (1991) conducted a study that reviewed the factors that audit committee members' use as surrogates for audit quality. In particular, the effect that the factors of audit firm size, length of tenure and general audit strategy had on audit committee members' audit quality assessments was investigated. Utilizing a case study approach, audit firm size, length of tenure and general audit strategy were manipulated, and subjects were asked to estimate the likelihood of the auditor discovering a material error (discovery error) and the conditional likelihood of requiring management to correct the error or reporting the error in the audit report (disclosure error). The findings of the study indicated that audit firm size and length of tenure significantly influence audit committee members' assessments of audit quality and, in particular, that length of tenure was significant in regard to discovery error. Also, audit firm size was significant regarding disclosure error. Audit strategy was not significant for either discovery or disclosure error.

Carcello, Hermanson and McGrath (1992) attempted to identify the attributes of audit quality perceived to be important by participants in the financial reporting process. They utilised a questionnaire of attributes thought to be related to audit quality and sent this to a sample of auditors, preparers and users of audit services, in order to discover what was perceived as contributing most to audit quality. All three groups in the sample considered that characteristics related to members of the audit team (team factors) were more important to audit quality than characteristics related to the audit firm (firm factors). There were significant differences between groups regarding individual aspects of audit quality. Preparers considered responsiveness to client needs to be more important in regard to audit quality than the other two groups.

Sutton (1993) utilized an approach similar to Mock and Samet (1982) and Sutton and Lampe (1990). The author used experienced auditors from two international accounting firms to develop and validate a set of key factors influencing the quality of the audit process and a set of measures useful in evaluating audit quality. The research method applied in the study was based on a specialized form of nominal group techniques. The study identified 19 quality factors within the categories of planning, fieldwork and administration. Several individual measures were identified for each of the 19 quality factors. The results indicate that there appears to exist a consensus amongst experienced auditors on a set of key factors that have an impact on overall audit quality.

Warming-Rasmussen and Jensen (1998) attempted to identify audit quality attributes from an external user perspective. They observed that a particular characteristic of auditing is that it is aimed at a heterogeneous group of stakeholders that may have divergent

interests. This characteristic of the audit market makes it more complicated but nevertheless just as relevant to determine exactly what users regard as quality. The authors indicate that prior studies such as Schroeder, Solomon and Vickery (1986) and Knapp (1991) have considered different stakeholder categories and that a comparison of these studies reveals that perceptions of audit quality differ between categories. With the exception of Carcello, Hermanson and McGrath (1992) prior studies have not analysed user heterogeneity. Warming-Rasmussen and Jensen (1998) therefore, examine how audit quality is perceived by two external user groups (shareholders and financial journalists). The results of the study indicate that firstly, external users tend to perceive audit quality attributes as attributes that also inspire confidence in the auditor. Secondly, whilst a number of different audit quality dimensions are identified, the dimensions mainly concern moral and ethical aspects. Finally, respondents assign significantly different values to these quality dimensions.

Chang and Monroe (2001) extended the work of Knapp (1991) in an Australian environment by considering additional factors which may have an impact on audit quality and the impact of those factors on assessments of perceived audit quality. The study investigates whether auditor reputation, length of auditor-client relationship, audit contract type, provision/non-provision of non-audit services and the level of fee dependence affect auditors', directors', and creditors' assessments of perceived audit quality on three dimensions. Data for the study was obtained via responses to a case study questionnaire developed originally by Knapp (1991). The results of the study show that all five auditor characteristics were significant indicating that they affected perceptions of audit quality. However not all factors affected assessments of audit quality to the same extent. Contract type, provision of other services and fee dependence were the factors with the most consistent results across quality measures and subject groups. The results of the study are of particular importance in that they indicate that there are discrepancies between perceptions of those who conduct the audit and those who purchase these services.

Duff (2005) developed an audit quality model using the audit expectations gap and service quality literature. A survey instrument (AUDITQUAL) consisting of 56 items relating to audit firm factors, engagement partner factors and audit team factors was developed. The 56 items were reduced to nine distinct audit quality dimensions and administered to partners in the 20 largest UK audit firms (representing auditors), finance directors of UK listed companies (representing financial statement preparers) and fund managers in the UK (representing external users). The statistical analyses of the data indicated that the nine audit quality dimensions could be reduced to create two distinct factors relating to technical quality and service quality. All three groups rated technical quality dimensions the highest.

## Conclusions and Policy Implications

As a result of a number of corporate collapses, the business community and accounting profession worldwide has recently received attention regarding the effectiveness of

corporate governance practices and the quality of the audit process. This increased attention has resulted in a number of investigations and regulatory changes such as, for example, the Sarbanes-Oxley Act in the USA, the UK's Combined Code and, in Australia, changes to the Corporations Act following recommendations contained in CLERP9.

As a result of these investigations into the effectiveness of corporate governance and the quality of the audit process, the accounting profession has taken a number of policy measures to improve audit quality in fact and in appearance. These have included (i) the profession's quality assurance program, namely peer review and second partner review, (ii) recognizing and controlling pressures within public accounting firms that might impact on audit quality, (iii) strengthening the independence and professionalism of auditors, and (iv) reinforcing self-regulation. As a specific example, in Australia, Statement of Auditing Practice AUP 32, "Audit Independence" was issued by the Australian Accounting Research Foundation (AARF) in 1992 to improve both actual and perceived audit independence. AUP 32 identified a number of factors that may affect perceptions of audit independence, including fee dependence, financial involvement, the provision of internal audit services and the periodic rotation of audit staff among engagements.<sup>2</sup>

Schelluch and Thorpe (1995) point out, however, that, in instituting such policy measures, the accounting profession appears to have relied on *a priori* arguments and normative assertions regarding factors that can impair actual and perceived audit quality, rather than on empirical evidence about such factors. Similarly, regulators have all but ignored the results of academic research in regulatory policy-making. Two recent examples from the US include the SEC's proposed ban on audit firms undertaking non-audit services in 2000 and the rapid adoption of the Sarbanes-Oxley Act in 2002 following Enron's collapse. These policy decisions have been made despite the fact that the empirical evidence regarding the effect of non-audit services on auditor independence is inconclusive and uncertain. What is certain, however, is that corporate regulators consider non-audit services to be a significant threat to auditor independence.

To date, there is only limited empirical evidence on the factors that affect perceptions of audit quality by groups and/or individuals interested in the audit process and audit reports. Yet, research into perceptions of audit quality is important because it is perceptions that determine the credibility of the audit report (Shockley, 1981) and have the potential to erode public confidence in the integrity of the financial reporting system (Pany and Reckers, 1988). Consequently, gaining understanding of factors that affect perceptions or assessments of audit quality is important as it can help regulators and the accounting profession to formulate policy based directly on such factors rather than on *a priori* assumptions (Schelluch and Thorpe, 1995). That is, from a practical perspective, such empirical research will allow regulators and the profession to formulate policies that effectively address the factors perceived to affect assessments of audit quality by individuals and/or groups associated with the audit process and audit reports.

## Notes

1. Big N varies in prior studies from Big 8 through to Big 4 currently. Big N is used to refer generically to this group of firms, except where a specific study of firms is cited.
2. AUP 32 has now been superseded by the Code of Professional Conduct F1 Professional Independence (CPAA and ICAA 2003) from January 1, 2004.

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